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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,297	11/24/2003	Joe A. Ortiz	PD-03W081	4117

23915 7590 04/06/2005

PATENT DOCKET ADMINISTRATION  
RAYTHEON SYSTEMS COMPANY  
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BLDG E1 M S E150  
EL SEGUNDO, CA 90245-0902

EXAMINER

PATEL, RAJNIKANT B

ART UNIT PAPER NUMBER

2838

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/720,297	Applicant(s) ORTIZ ET AL. <span style="float: right;">(SW)</span>	
	Examiner Rajnikant B. Patel	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.  
 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-26 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14- 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hwang (U.S. Patent # 6,657,417).

Hwang discloses the claimed invention an active-power filter (figure 5-6 and 8-11), including a control circuit (column 6, item 100), output voltage sense signal (figure 6, item P7), a feed-forward signal and current regulation (column 2, line 25-30), pulse-width-modulation (column 2, line 45-55), nominal frequency (column 3, line 50-65)

3. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wittenbreder, Jr. (U.S. Patent # 6,101,108).

Wittenbreder, Jr. discloses claimed invention an active power filter for regulating input current (figure 5 and 7), including forward converter topology (Abstract, line 1-15).

4. Claims 1, 14 and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Krein et al. (U.S. Patent # 5,668,464).

Krein et al. disclose the claimed invention a system for a system (figure 2-5), including a feedforward topology, an active filter and regulating input current (figure 2 and Abstract, line 1-12).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al. (U.S. Patent # 5,777,866) in combination with Ribarich et al. (U.S. Patent # 6,259,614).

Jacobs et al. disclose the claimed invention an active-power filter (figure 2 and 10-12), including a control circuit (column 3, line 65-68), output voltage sense signal, a feed-forward signal and current regulation (column 4, line 45-60), a nominal frequency (column 6, line 45-55), a summing amplifier (column 5, line 60-65), a pulse width modulator (figure 12, pulse-width modulator and claims 7-11). However Jacobs does not disclose the utilization of the technique for a charge-storage element to store charge from current receive through the rectifying element. Ribarich et al. teaches the utilization of the similar technique for a charge-storage element to store charge from current receive through the rectifying element (column 3, line 5-25). It would have been obvious

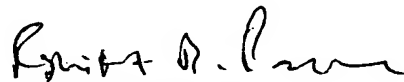
Art Unit: 2838

one having an ordinary skill in the art at the time the invention was made to modify Jacobes et al.'s power factor correction system by utilizing the technique taught by Ribarich et al. for the purpose of improving power factor with minimal component count.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 305-7042. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 703-308-1680. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rajnikant B Patel  
Primary Examiner  
Art Unit 2838

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